

# Work Order ID 80619

Friday, February 24, 2012 1:24:51 PM

**\*80619\***

*Ship March 2nd*

Page 1

Item ID: DSI 9464-011

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Skidtube Tuning

Stop

**\*NS2\***

Start Date: 2/24/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 3/2/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals: Process Plan: *mf*

Date: *12-02-24*

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D3955	A
-------	---

DSI 9464	B
----------	---

100

0.00

**\*100\***

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP DSI 9464-011  
CHG001

*5/2/28*

*Per MLT 12-2-28*  
*(2)*

110

Pick Kit

0.00

**\*110\***

Packaging

Memo

0.00

Packaging

*4/2/28*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 80619

\*80619\*

Page 2

Friday, February 24, 2012 1:24:51 PM

Item ID: DSI 9464-011

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Skidtube Tuning

Stop \*NS2\*

Start Date: 2/24/2012 Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 3/2/2012 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

120

QC4- 100% Inspect kits for completeness

0.00

\*120\*

QC

Memo

0.00

Quality Control

130

0.00

\*130\*

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP DSI 9464-011

Location:

PPP rev: 5410

140

QC21- Final Inspection - Work Order Release

0.00

\*140\*

QC

Memo

0.00

Quality Control

(+2)

12/2/28

12/2/28  
ME  
12-02-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Friday, February 24, 2012 1:24:50 PM

Page 1

Work Order ID: 80619

Parent Item: DSI 9464-011

Parent Item Name: Skidtube Tuning

Start Date: 2/24/2012

Required Date: 3/2/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP RevA: New issue DD verified by:EC  
10.04.19 verified byEC

IPP Rev:B as per ECN10-553 DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
S <sub>2</sub> D3955-041 Doubler Assembly		Manufactured	No			110	Each	3.0000	2	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST075		3							
				69048		3							
S <sub>2</sub> D3955-3 Cover Plate		Manufactured	No			110	Each	0.0000	2	4			
S <sub>2</sub> D3955-5 Plate		Manufactured	No			110	Each	5.0000	2	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST075		5							
				69050		5							
S <sub>2</sub> D3955-7 Plate		Manufactured	No			110	Each	1.0000	6	12			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST098		1							
				69051		1							
S <sub>2</sub> D3955-21 Gasket		Manufactured	No			110	Each	2.0000	2	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST075		2							
				67410		2							
S <sub>2</sub> D3955-23 Template		Manufactured	No			110	Each	0.0000	2	4			

69048 3x 80622 11x 2x sl  
80621  
69050  
80622 11x  
69051 1x  
80623 2x  
67410 2x  
80624 4x 2x (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Friday, February 24, 2012 1:24:50 PM

Page 2

Work Order ID: 80619

Parent Item: DSI 9464-011

Parent Item Name: Skidtube Tuning

Start Date: 2/24/2012

Required Date: 3/2/2012

Start Qty: 2.00

Required Qty: 2.00

CR3212-4-04

Purchased

No

110

Each

7,829.0000

38

76

Cherry Rivet

## Location

## Loc Qty

## Loc Code

ST331

184

116471

78

117816

3

118686

1

118840

16

119017

76

119075

10

st510

7645

119075

7645

119017-164

119075-60x

AN3-5A

Purchased

No

110

Each

1,195.0000

4

8

Bolt

## Location

## Loc Qty

## Loc Code

ST350

1195

115371

46

117423

204

118626

245

119355

200

120187

500

118626

AN3-6A

Purchased

No

110

Each

338.0000

4

8

Bolt

## Location

## Loc Qty

## Loc Code

ST351

338

117441

88

119775

50

120498

100

120644

100

117441

AN3-7A

Purchased

No

110

Each

155.0000

4

8

Bolt

## Location

## Loc Qty

## Loc Code

ST351

155

117872

155

117872

Friday, February 24, 2012 1:24:50 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Friday, February 24, 2012 1:24:50 PM

Page 3

Work Order ID: 80619

Parent Item: DSI 9464-011

Parent Item Name: Skidtube Tuning

Start Date: 2/24/2012

Required Date: 3/2/2012

Start Qty: 2.00

Required Qty: 2.00

AN3-10A  
Bolt  
Purchased No

110 Each 96.0000

4 8

## Location

## Loc Qty

## Loc Code

GA 90  
~~119084~~ 90  
ST351 6  
117795 4  
~~119128~~ 2

119084 60

119128 20

NAS1149D0332J  
Washer  
Purchased No

110 Each 2,271.0000

6 12

## Location

## Loc Qty

## Loc Code

ST298 2271  
105793 12  
110985 4  
117087 89  
~~119042~~ 276  
~~119717~~ 890  
120644 1000

119042

MS21042L3  
Nut  
Purchased No

110 Each 4,110.0000

2 4

## Location

## Loc Qty

## Loc Code

ST300 4110  
117441 16  
117885 32  
118451 5  
118927 3  
~~119017~~ 3854  
119075 200

119017

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

REFERENCE ONLY

## DART SERVICE INSTRUCTION

TO AMEND:

INSTALLATION INSTRUCTIONS D205-634 REV. F OR EARLIER,  
INSTALLATION INSTRUCTIONS D204-635 REV. F OR EARLIER,  
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D205-634 REV. 3 OR EARLIER,  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D204-635 REV. 3 OR EARLIER

REF CANADIAN STC: SH96-88  
REF FAA STC: SR00563NY  
REF EASA STC: EASA.IM.R.S.01303

### Purpose:

The Purpose of the DSI 9464-011 Kit is to allow operators to tune landing gear utilizing D205-634-041 / D204-635-041 skidtube in order to eliminate vibration. This kit consists of various weights that can be attached to the fwd cap of the Dart skidtube.

### Procedure:

Note: Installer must be careful not to damage underlying skidtube during drilling operations.

- 1) Locate D3955-23 template on the fwd cap of the skidtube. Transfer drill 19 x Ø0.098" holes from the D3955-23 template to the skidtube cap using a #30 drill.
- 2) Transfer drill 1 x Ø0.625" (15.8 mm) from the D3955-23 template to the skidtube as shown in Figure 1.
- 3) Transfer drill 1 x Ø0.201" (#7 drill) from the D3955-23 template to the skidtube as shown in Figure 1.
- 4) Deburr the drilled holes in fwd cap. Ensure the top surface of the cap is clear of debris.
- 5) Apply a layer of Sikaflex-241/-291 or Proseal 890 or MIL-S-8802 Class B2 sealant between the D3955-041 Doubler and the existing skidtube cap. Install D3955-041 Doubler Assy. using 19 x CR3212-4-04 rivets as shown in Figure 1. The nutplate in the D3955-041 Doubler Assy should pass thru the Ø0.625 hole in the cap.
- 6) Install tuning plates as shown in Figure 2. Torque AN3 bolts 15-25 in-lb (1.7-2.8 N-m). Test the landing gear for vibration.
- 7) If vibration persists, repeat step 6 until vibration is eliminated.
- 8) Update Weight & Balance as outlined below.

### Weight And Balance:

The weight and balance increase associated with the installation of the DSI 9464-011 kit will depend on the number of plates that are installed to tune the gear. The weight of individual plates are given in the Parts List Table. The longitudinal arm for the installation of the DSI 9464-011 kit is 40.0 in (1.02 m) on 205/210/212/214/412 models and 42.0 in (1.07 m) on 204 models.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-Q-01

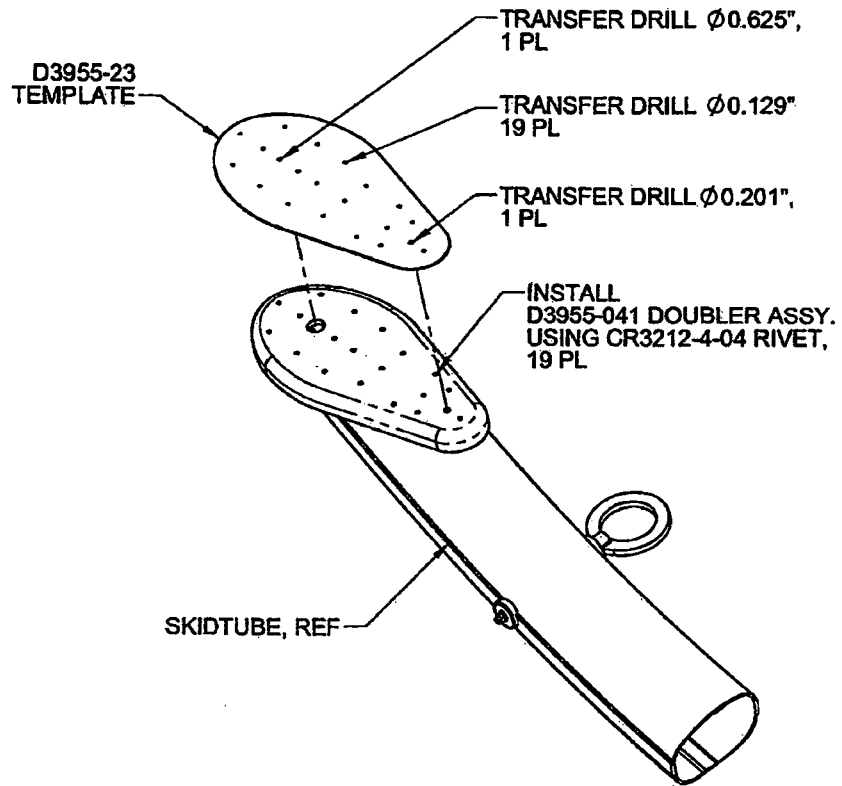
APPROVED

BY: [Signature]  
D. SHEPHERD (DE # 02)

DATE: 10.04.14  
CERT. NO.: SH96-88  
ISSUE NO.: 3

B	ADD REF TO D204-635	CP	10.04.14
A	NEW ISSUE	RF	09.07.21
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD	
DRAWN	[Signature]	HAWKESBURY, ONTARIO, CANADA	
CHECKED	[Signature]	DRAWING NO.	REV. B
MFG. APPR.	[Signature]	DSI 9464	SHEET 1 OF 3
APPROVED	[Signature]	TITLE	SCALE
DE APPR.	[Signature]	SKIDTUBE TUNING KIT	NTS
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# REFERENCE ONLY



**Figure 1**

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DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

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BY: *[Signature]*  
D. SHEPHERD (DE # 02)

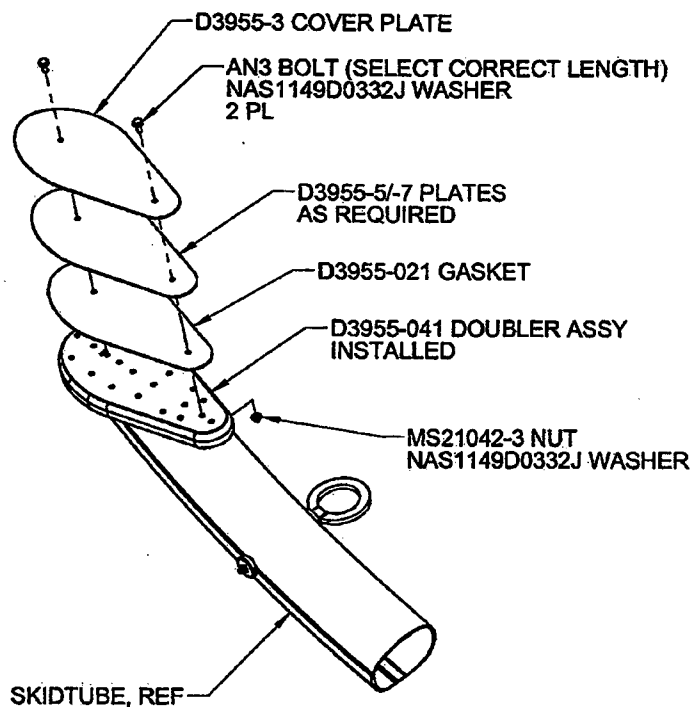
DATE: 10.04.14  
CERT. NO.: SH96-88  
ISSUE NO.: 3

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9464	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SKIDTUBE TUNING KIT	NTS
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# REFERENCE ONLY

## Part List

Qty -011	Part Number	Description	Weight
X	DSI 9464-011	SKIDTUBE TUNING KIT	N/A
2	D3955-041	DOUBLER ASSEMBLY	0.25 lb/ 0.11 kg
2	D3955-3	COVER PLATE	0.64 lb/ 0.29 kg
2	D3955-5	0.063" THICK PLATE	0.64 lb/ 0.29 kg
6	D3955-7	0.125" THICK PLATE	1.28 lb/ 0.58 kg
2	D3955-21	GASKET	0.08 lb/ 0.04 kg
2	D3955-23	TEMPLATE	N/A
38	CR3212-4-04	RIVET	N/A
4	AN3-5A	BOLT	N/A
4	AN3-6A	BOLT	N/A
4	AN3-7A	BOLT	N/A
4	AN3-10A	BOLT	N/A
6	NAS1149D0332J	WASHER	N/A
2	MS21042L3	NUT (OR MS21042-3)	N/A



**Figure 2**




CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

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BY:

D. SHEPHERD (DE # 02)

DATE: 10.04.14  
CERT. NO.: SH96-88  
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DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		DSI 9464	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SKIDTUBE TUNING KIT	NTS
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